Project Management Guidelines

Overview

Section 86-1506 (5) directs the NITC to adopt guidelines regarding project planning and management. The goal of project management is to achieve the objectives of the project on time and within budget. Project management should define the responsibilities of project sponsors, and provide for adequate monitoring and reporting to the appropriate managers of the sponsoring entity and policy makers. It should allow a means to document benefits, monitor the scope and completion of projects, and compare costs.

The size and complexity of a project will determine the approach and structure required for good project management. Small projects may require only informal procedures. Large projects may require professional project managers and a formalized project management methodology.

Project management is essential for projects that present unusual or high risks. These risks may include:

- Technical (such as new technologies to the state or the sponsoring entity),

- Work processes (such as new functions or different ways of performing functions),

- Organizational (such as dealing with multiple organizational entities),

- Legal, contractual, regulatory, or

- Other (such as system size, funding limitations, project duration, timetable flexibility, technical or business complexity, implementation challenges, importance to the operation of the organization, or interrelations with other systems).

The NITC intends to develop standards and guidelines regarding project planning and management that are supported by the Project Management Institute (PMI) through the Project Management Body of Knowledge (PMBOK). PMI is the leading nonprofit professional association in the area of project management. PMI establishes project management standards and provides seminars, educational programs and professional certification to the project management profession. The PMBOK is an inclusive term that describes the sum of knowledge within the profession of project management.

The PMBOK describes a project as a temporary endeavor undertaken to create a unique product or service. Types of information technology projects may include feasibility studies, research efforts, information technology strategic or other planning initiatives, system implementation, or development projects.

These general procedures for project management and implementation include three components:

- Project Charter (to summarize expectations and responsibilities)
- Project Implementation Plan (to provide the detailed analyses that guide the project from beginning to conclusion)
- Project Tracking and Reporting (to communicate the progress of the project compared to expectations)

Applicability

All state agencies and public higher education institutions using state appropriations for information technology should adopt project management and implementation procedures, such as those presented in this guideline. All political subdivisions and major public service organizations should adopt similar policies to guide project management and implementation.

State-funded entities should follow these or similar project management guidelines for major projects and projects that have statewide strategic importance.

A "major project" includes projects that would have a significant effect on a core business function of the sponsoring organization. In addition, any project that would incur total cumulative expenditures of $250,000 or more should be considered a major project.

A "statewide strategic project" affects multiple government programs or departments. These projects may involve interfaces with other applications, provide data to or receive information from other applications or government programs or organizations. Statewide strategic projects may impact state and local governments, private industry, citizens, or state employees beyond the sponsoring agency within a department or beyond the responsible department. Statewide strategic projects impact the state and its citizens from an enterprise perspective that is broader than the sponsoring organization.

Instructions

Project Charter

The project charter is the primary document that sets expectations for the project among the stakeholders. The responsible manager within the sponsoring entity should commit to the completion of the project within the parameters of the project charter. The charter will set forth the project scope, schedule, budget, and benefits. The project charter also:

- Identifies the project sponsor, project manager, and responsibility for project success
- Sets baselines to assess progress
- Documents assumptions which must hold true for the project to satisfy expectations
- Provides a means to modify project expectations and deliverables, if changes occur

The contents of the project charter should include:

- **Project Description.** Include a brief description of the purpose of the project in non-technical terms.
- **Project Scope and Objectives.** Include one or two paragraphs defining the project scope and objectives in terms of the specific business functions the project will support. Refer to an expanded definition of project scope in the supporting material, if necessary.
- **Schedule**. Set deadlines for project deliverables. Define when the project starts and the projected completion date. Document major milestones that should be finished at certain dates.
- **Staffing.** Identify what skill sets are required on the project and who is responsible for specific activities.
- **Total Development Cost.** Include the current total development cost estimate for the project from the initial Project Plan or as revised in the Project Implementation Plan. Include a summary of staffing requirements and costs.
- **Total Net Cash Flow.** Provide the cash flow of the project for the entire life cycle.
- **Funding Source.** Document the source of funds and indicate any contingencies.
- **Summary of Benefits.** Include a brief list of tangible and intangible benefits for the project. Refer to an expanded presentation of project benefits in the supporting material, if necessary.
- **Risks.** Identify major risks associated with the project and what action is anticipated to mitigate them.
- **Responsibilities.** Document the responsibilities and authority of the major participants, including the sponsor(s), project manager, and other persons who control different variables that affect the success of the project.
- **Signature blocks for approval**. Signatories are the agency head or appropriate manager within the sponsoring entity, project manager, and other stakeholders, if multiple units of government are involved.

Project Implementation Plan

Each project manager should develop, maintain, and follow a written plan that defines project goals, processes, and resource estimates (in terms of schedule, cost, and development). The implementation plan must be updated throughout the life of the project to accurately reflect the current plan.   The implementation plan should review and update the original Information Technology Project Proposal that served as a decision document for funding. The implementation plan serves as supporting documentation for the project charter.

The project implementation plan should summarize the results of any detailed development planning, including the requirements definition, the general design, and feasibility study.

The project implementation plan should include a well-defined problem statement with well-defined business and technical requirements that assure the information technology solution satisfies the business need. Requirements must be thoroughly documented and understood by the project team. Changes to requirements must be managed throughout the life of the project.

Risks associated with each information technology project should be identified, analyzed, and prioritized. Identified risks should be controlled through the processes of project planning and monitoring. Risk identification and management must be integrated components of project management and risks must be continuously assessed and analyzed during the life of the project.

Project Tracking and Reporting

Project managers should continuously track the progress of all projects against the project implementation plan. Project tracking involves monitoring and reviewing the project accomplishments and results against documented estimates contained in the implementation plan, and adjusting these estimates based on the actual accomplishments and results. Project tracking and reporting should serve the needs of:

- Project management
- Project sponsors
- Agency directors
- Policy makers

Close attention to basic control principles will improve the success of projects. Achieving this requires a disciplined approach to tracking project status, anticipating potential problems that may arise, and quick attention to resolve any problems. Project tracking and reporting should include the following minimum components, with a comparison between estimated and actual status for that time period.

- Changes to project sponsorship, management, or organization

- Project schedule and milestones (including changes to scheduled dates for key deliverables or milestones and planned completion date)
- Project budget (including cash flow and funding sources)
- Project scope, objectives, or requirements (if any changes occur)
- Summary of accomplishments since the last reporting period
- Summary of past, current and future issues (including steps to mitigate actual or potential problems and an updated risk analysis)

Project tracking methods and requirements will vary by project, based on the size, cost, complexity, and impact on the affected organizations. The management of a project includes processes for tracking and communicating project status and performing risk assessments. The formality of this tracking process may change, based on the specific project. The project manager has responsibility for tailoring all elements to meet the specific needs of the project. These same factors will affect the frequency of reporting, whether monthly, quarterly or less frequently. All projects should have a final report that summarizes final costs, issues, and lessons learned.